The distal portion of the fibula is free from the tibia; and its shaft becomes very slender; but it is possible that a more perfect specimen would display it as continuous. Its distal extremity articulates with the ascending tuberosity of the calcaneum. The cuboid facet of the latter is narrow. The cuboid and navicular are distinct from each other and the cuneiforms; the mesocuneiform is shorter than the ectocuneiform, and is co-ossified with it.

There are probably four metatarsals. The median pair are distinet, but appressed; their section, together, subcircular; the lateral metatarsals are slender; the external one is wanting, but its facet on the cuboid is very small.

These characters are in general similar to those of the genus *Dichobune*; but Cuvier^{*} does not state whether the cuneiforms are co-ossified in that genus or not. They are united in *Anoplotherium*.

Mioclenus differs from *Dichobune* in the presence of but one internal tubercle of the superior molars, and in the single external tubercle of the superior premolars. Both genera are referable to a family to be distinguished from the Anoplotheriidæ by the presence of external digits. This has been already named by Gill the Dichobunidæ. The genus *Lophiochærus* is not yet fully characterized ; but its inferior true molars are very elongate and have their cusps connected by oblique ridges.—*Amer. Nat.*, Jan. 1882.

On the Genus Cladocora, Ehrenberg. By Dr. A. von Heider.

The author finds the structure of the polypes of *Cladocora* to agree exactly with that of the Actiniæ, and only the basal half of the polype modified by the acquisition of the solid calcareous skeleton.

The exclusively mesodermal formation of the skeleton, already established for the larvæ of Corals, is confirmed in *Cladocora*: and the author describes a cell-layer originating from the mesodermal lamella, and situated between it and the calcareous matter, the elements of which he names *chalicoblasts*. Within the chalicoblasts are produced the calcareous particles which unite to form the wellknown acieular systems shown by sections of the coral skeleton. By the chalicoblasts calcareous material is gradually secreted at the external surface of the polype; and by this means the growth of the polypary, in the direction of its longitudinal axis, is effected, while the tot polype itself is implicated in this only in so far as that it is *in toto* pushed upwards.—*Anzeiger d. kais. Akad. Wiss. in Wien*, December 15, 1881, p. 272.

The Characters of the Taniodontia. By E. D. COPE.

Additional material gives the following results with regard to the affinities of this suborder. There are three allied groups, represented

• Ossemens fossiles,' v. p. 183. Gaudry, Enchaînemen ts du Règne Animal,' p. 147.

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